

*O. spiralis*. Burrow Island, Mr. Barlee.

*O. interstincta*. Burrow Island; Bantry Bay; Mr. Barlee.

Var. *a*. Guernsey, Mr. Barlee.

*O. indistincta*. Guernsey, Mr. Barlee.

*O. excavata*. Land's End, Mr. Barlee; Exmouth, Mr. Clark, who notices that his specimen has "a strong conspicuous fold or tooth about the middle of the columella."

*O. scalaris* var. *a*. This is proposed to be distinguished by Messrs. Forbes and Hanley as the typical species, the name of *rufescens* being appropriated by them to the other species or variety. I however believe the latter to be only a northern form or variety.

*O. lactea*. Guernsey; Burrow Island; Mr. Barlee.

The variation of form in many of the species appears to be very considerable; and it would be easy to add several others to the list.

XIII.—Notes upon the smaller British Moths, with descriptions of some nondescript or imperfectly characterized species. By JOHN CURTIS, Esq., F.L.S. &c.

#### Family TORTRICIDÆ.

1. Genus 946, 4<sup>b</sup>\*. *Tortrix* (*Ænectra*) *Pilleriana*, Hüb. pl. 27. f. 172 ♀, and *luteolana*, Hüb. pl. 21. f. 136, is a very variable species, and differs from the other *Tortrices* in the form of the palpi. Several specimens were taken by W. W. Saunders, Esq., at the back of the Isle of Wight. The larva lives principally upon the vine, and is very destructive in the vineyards of France, but it will feed also on *Stachys germanica*, and in the capsules of *Iris fœtidissima*, which abounds at Niton.

2. 28. *T. croceana*, Hüb. pl. 19. f. 120; *Modeeriana*, Haw. I took this rare species on 3rd July, 1842, on Bordean-hangers, near Petersfield, Hants.

3. Genus 947, 2. *Amphisa Walkerana*, Curt. Brit. Ent. pl. 209. In the summer of 1827 Mr. H. Walker took two males of this curious little moth near Lanark, which I described and published the following year, and he afterwards saw it flying in some abundance over heathy districts, the end of March, in the sunshine about noon, on Tinto, a hill near Lanark.

\* As great confusion often arises for want of references to some accessible work, the numbers of the genera and species of Curtis's Guide, 2nd ed., have been added, as well as those of the 'Brit. Ent.'

On the authority of Zeller, Mr. Doubleday has changed my name for "*prodromana*," vide "Hüb. Caterpillars, *Tortrices* 4, Genuinæ B, c, fig. c," and on referring to the plate where the moth is figured with its wings closed, I am not satisfied that it represents my insect: it has simple antennæ, it is much lighter than any I have seen, and the shoulder-marks are different: nevertheless it may represent the female.

4. Genus 950, 23. *Spilonota tetragonana*, Step. I took a specimen 11th July, 1842, on a hedge bounding a wood going to Woolmer Forest from Selborn.

5. 26. *Spilonota sylvestrana*, Curt., was first discovered by Mr. Dale at Bournemouth, and from the 23rd June to the 1st July we found it there in 1846. It inhabits the Pinasters on the cliffs, and we beat it into our nets in the daytime. It has been distributed amongst entomologists by the name of "*duplana*" of Hübner, pl. 36. f. 229 & 230, to which it is not unlike, but much smaller: it also resembles the small dark varieties of *S. comitana*, Hüb.

It is gray: head grisly and crested; palpi horizontal, very scaly, second joint rhomboidal, apical not apparent; basal joint of antennæ stout; they are closely annulated with black: wings deflexed in repose; superior oblong, tip rounded; gray, transversely but irregularly striped with brown and chestnut, one-third of the base and a space towards the posterior margin darker, at the centre of this is a brownish-ochreous orbicular but not well-defined patch; the costa is spotted gray and dusky; the cilia are griseous with a black line at the base: under-wings pale golden-brown; cilia tinted, with a darker line: the under-side is of an uniform pale golden-brown, the costa slightly spotted: hinder tibixæ stout, with a pair of spurs below the middle, a little longer than the apical pair: expanse from 6 to 6 $\frac{3}{4}$  lines.

6. 27. *Spilonota (Sideria) achatana*, W.V.; *marmorana*, Hüb.; Curt. Brit. Ent. pl. 551. The 12th July, 1848, I beat four out of blackthorns by Pole Hill, near Uxbridge.

7. Genus 955, 5. *Anchylopera Lyellana*, Curt. Brit. Ent. fol. 376, having been first added to our British fauna by Sir Charles Lyell, who took it in June at Kinnordy in Forfarshire, I named it after my friend, but it seems to have been described previously by Treitschke under the name of *Phoxopteryx myrtillana*, and has been since figured by Duponchel, vol. x. pl. 253. f. 4.

8. 8. *A. diminutana*, Haw.; *cuspidana*, Treit. I have taken it the middle of August at Mickleham in Surrey, and Mr. Dale finds it at Lulworth in Dorsetshire.

9. Genus 957, 12. *Carpocapsa nigricana*, Haw. Our specimens do not agree with the Fabrician description, but Haworth's insect seems to be the *Grapholitha nebritana* of Treitschke, and is the "Pisana" of Guené, according to examples from Paris, which Mr. Doubleday obligingly showed me. This is a most interesting species, as it is the parent of the maggots in peas, which we have so long endeavoured to rear, but unsuccessfully.

10. 25. *C. Queketana*, Dale, was first discovered I believe on a bank going to Burkham on the south side of the river the end of April 1842. I fear this name will fall, as Doubleday considers it the *T. fractifasciana* of Haworth, and the *Eriopsila caricana* of the continent.

11. Genus 959, 1. *Cnephasia bellana*, Curt. B. E. pl. 100. Immediately after a most successful entomological tour made in Scotland by Mr. Dale and myself, during the summer of 1825, I published this beautiful species, being one of the novelties I detected ascending Arthur's Seat. Nine years after it was described by Stephens as the *T. Penziana*?; *T. octomaculana*, Haw., being given as a variety. Wood of course followed in the same wake, and has consequently figured my new species as 'Penziana,' and omitted to delineate 'octomaculana,' which is distinct enough from *C. bellana*, but considerably like, if not identical with, Hübner's *Penziana*, pl. 14. fig. 85.

Here is one amongst hundreds of instances in which names have been changed and misapplied from either ignorance or caprice to the destruction of science, creating a mass of confusion, which it is to be hoped Mr. Henry Doubleday and Mr. Stainton will eventually set right.

12. 2. *C. octomaculana*, Haw. MSS., expands from 10 to 11 lines: it is pale fuscous: superior wings white or grayish-white with two irregular brown bands; the first near the base angulated, edged with black and not reaching the inner margin, second crossing the middle obliquely, very irregular, dotted with black, forming a kind of triangle on the costa united to a rhomboidal spot on the disc and detached from a smaller one on the inner margin; towards the apex is a spot leaving a pale patch on the costa, and a smaller one nearer the tip; towards the posterior margin are two or three irregular oblique lines of black dots.

Of this rare species, which has never been described, I caught two the 19th July, 1825, which flew out of a stone wall near the Inn at the base of Ben Lawes.

13. 3. *C. cretaceana*, Curt. It expands 10 lines, and is chalk-white: superior wings with very faint indications of spots and bands freckled with gray: inferior wings pale fuscous. I never



met with this insect but once, and then in abundance on the paling round Dover Castle in July 1829. I suspect it is only a strong variety of *C. octomaculana*, as some of my specimens approach that insect.

14. 10. *C. rectifasciana*, Haw. I am not satisfied that this is the insect figured by Hübner (pl. 38. f. 238) under the name of *T. hybridana*: it is larger and darker, and the markings have a different character; indeed it reminds me more of a variety of *T. comitana*.

Mr. Doubleday having applied my generic name to that portion of the group which is not typical, it becomes necessary to repeat, that the type of *Cnephasia* is a species abundant on elm-trees, the *T. logiana* of Haworth, which in 1826, when I established its characters, was believed to be synonymous with the Linnæan species, as well as with the *T. pascuana* of Hübner, pl. 16. f. 99. The name *Sciaphila*, which Mr. Doubleday has substituted for *Cnephasia*, was not published by Treitschke until 1829, and could not therefore be applied to my group, even had it not been preoccupied by Schönherr for a genus of Curculionidæ four years before Treitschke adopted it. It may be as well to correct the spelling of Hübner's name, which in his letterpress is *pascuana*, but by an error of the engraver the *s* has been converted into an *i*, making the unmeaning word *pasiuana*, and *pasiwana* of Doubleday's list.

15. Genus 960, 1. *Orthotenia* (*Euchromia*, Step.) *formosana*, Curt. B. E. fol. 364. This was described by me in 1831, not as the *T. formosana* of Hübner as indicated by Mr. Doubleday, a species I am unacquainted with, as well as his *T. flammeana*, neither of which can I find in the Index to Hübner's works nor in Treitschke.

16. 13. *O. Arbutana*, Hüb. pl. 31. f. 195. Mr. Dale feels confident this is the *T. Arbutella* of the Linnæan cabinet.

17. 7. *O. alternana*, Curt. *ib.*: *Daleana*, Doub., was also described in 'Brit. Ent.' in 1831, where I adopted the names in the 1st ed. of my 'Guide,' and not of the 'Wiener Verzeichniss,' where I am unable to find *T. alternana*; and even if it be there, I must protest against the superseding of established specific names, unless the name has been employed in the same group previously. If such be the case in the present instance, I fully approve of the name of my friend, which Mr. Doubleday proposes.

18. 8. *O. gramineana*, Curt. *ib.*, also described on the above page of 'Brit. Ent.' At that time I stated it was "most allied  
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to and the size of *O. cespitana*, Hüb.," an opinion which has recently been confirmed by Mr. Doubleday.

19. 9. *O. cespitana*, Curt. ib. Mr. Doubleday being satisfied that this is not Hübner's insect, but one described in the 'Isis' by Mad. Lienig as *T. palustrana*, my name must be transferred to the preceding species. I regret to see it separated from *Orthotania* and made one of a new genus called *Mixodia* by Guené, for surely it cannot be necessary to form a genus to receive a species so closely allied to *O. cespitana*, that one may be mistaken for the other: sections are infinitely better, and to these we must come at last, when we have been overwhelmed with the burden of generic nomenclature. This extravagant rage for making genera has however had its use, having led to a refinement of discrimination which has been most beneficial in correcting the slovenly habits of investigation that attached even to the magnates of the last century and somewhat later.

20. Genus 963, 6. *Cochylis marmoratana*, Curt. Brit. Ent. fol. 491. The species since described under the name of *luteolana* by Stephens, and figured by Wood, pl. 37. f. 1140, appears to be a variety of my *marmoratana*.

21. Genus 967. *Peronea*, Curt. Brit. Ent. fol. & pl. 16. Since this genus was published in 1824, prodigious strides have been made in entomology, and large quantities of these *Tortricidæ* have been bred by Mr. Doubleday, who considers a vast number of the species merely varieties of two types, viz. *T. cristana*, W. V., and *T. hastiana*, Linn. If Lepidoptera vary to such an extent, it may be well asked, 'What is a species?'

#### Family CRAMBIDÆ.

22. Genus 991<sup>b</sup>. *Anerastia*, Zell.; *Abraxes*, Guide.

2. *Farrella*, Curt. Cab. Expanse 11 lines; and similar in form to *A. Marisci* or *T. lotella*, Hüb. pl. 48. f. 334. It is whitish, the horns are very slender and flesh-coloured, as well as the back of the thorax: superior wings narrower than in *lotella*, gray freckled with brown; the costa brown, with a white streak from the base to near the tip, and a suffused space of ochraceous flesh-colour along the centre; before the middle, on the inner margin, is a black dot, and three more beyond the middle in a curve, one being on the costa, another on the inner edge of the white streak, and a third below it: inferior wings pale silky smoky lilac.

For a specimen of this pretty and distinct species I am indebted to Mr. H. F. Farr: two or three were taken at the North Lighthouse, Lowestoft, the beginning of June 1840.

23. Genus 993, 9<sup>b</sup>. *Phycita bilineata*, Curt. Cab. It is the

size of *P. fusca*, Haw., but of a pale mouse-colour with a slight ochreous tinge, and the upper wings are narrower with a pale irregular transverse line, a little more than one-third from the base, but it does not seem to reach the costa, and there is an indistinct blackish dot on the disc: the under-wings are pale smoky with a nacreous silky surface: the antennæ are very slender and apparently simple, but it is a very old and imperfect male which I took when residing in Norfolk.

24. Genus 994, 6. *Eudorea Portlandica*, a name given to this moth by Mr. Dale, from his finding it only in the Isle of Portland. It seems to me to be the *E. phæoluca*, described and figured in the Linn. Entom. vol. i. p. 306. No. 15. fig. 13.

25. 6<sup>b</sup>. *E. concinnella*, Curt. Cab., expands 7 lines, being much smaller than *E. Mercurella*, Linn., which it most resembles: it is however entirely of a dark brown; nearly one-third from the base of the upper wings is a curved whitish striga, and intermediate between it and the shoulder is another; on the disc is an indistinct black  $\Omega$ , beyond it an oblique white line, suddenly curved near the costa; a line of black dots at the base of the cilia, forming a little black spot near the middle, surrounded by gray scales, extending irregularly along the posterior margin: under-wings pale brown, whitish at the base.

I cannot remember where I took this distinct and unique specimen, unless it was at Bournemouth.

26. 8. *E. lineola*, Curt. Brit. Ent. fol. 170. It expands 8 lines, is white, head, palpi and thorax grisly; abdomen fuscous, edges of segments white: superior wings rather narrow, clouded with brown; the base is brown with an oblique black and white costal stripe, reaching only half across and forming on the costa, with the next, a white patch; this second line is white, very tortuous and margined with black externally; to the centre loop is attached a black oval spot; above it, but nearer the middle, is a small white dot in a black ring, and beyond it a black  $\Omega$ , white in the centre; towards the hinder margin is an oblique sinuose white striga with a large curve, filled internally by a brown patch, and externally at the costa and opposite extremity are two other brown patches, the latter with a black arrow-head; these leave a semi-oval white space on the hinder margin, at the centre of which is a small brown spot bearing black pointed dots extending along the cilia, which is spotted black: under-wings fuscous-white, with a transverse pale sinuated line nearly parallel to the margin, as noticed in 'Brit. Ent.'—Wood's fig. 1446 is not good.

27. 9. *E. Resinea*, Haw. Lep. Brit. p. 499. Mr. Stephens having described this species under the above title in 1834, I



consider that it is quite unnecessary to disturb a name by which it was so well known, to admit one proposed by Guené, who in a letter calls it *delunella*. It was no doubt negligent of Haworth to transcribe Linnæus's characters of his *Tinea Resinella*, which he did with ?s, but as there is no such Linnæan insect as *Tinea Resinea*, no confusion can arise from retaining Haworth's and Stephens's name, by which it is identified in all our catalogues as well as by Wood's figure 1448, and an appropriate name it is, as the moth is always found on the trunks of Coniferæ.

28. 13. *E. angustea*, Curt. B. E. fol. 170, expands 7 lines. It is ashy-brown, the upper wings very narrow and gradually tapering to the base, towards which is an oblique broadish pale curved line, dark outside; on the disc are a minute oval and the usual ♀ spots, but indistinct; and beyond them a very oblique sinuose pale narrow line well defined, the inner margin brown; base of the cilia gray with a line of black dots: under-wings pale yellowish-fuscous.

Wood's figure 1450 is not my *E. angustea*, but merely a variety of *E. Mercurella*. The only specimen I possess I caught in a damp cave at Tunbridge Wells the end of Aug. 1819, where I saw many more.

29. 14. *E. alpina*, Dale's MS. It expands 9 lines and may be only a large variety of the foregoing, but all the examples are paler, with an additional black oval spot below the minute one on the disc, and upon the under-wings is a pale transverse striga nearly parallel with the margin.

Mr. Dale's specimens were taken on Schichalion.

#### Family TINEIDÆ.

30. Genus 1008. *Depressaria*, Haw.; Curt. Brit. Ent. fol. & pl. 221.

20. *D. bipunctosa*, Curt. Guide. It expands 11 lines and is whitish-ochre, the spaces between the marginal nervures of the upper wings are slightly fuscous, and on the disc of each are two distinct black dots, forming a longitudinal curved line, with another at the base, and the apex of the costa and posterior margin bear ten black spots: the under-wings are pale fuscous: antennæ and legs fuscous.

This is not a variety of Hübner's *T. Verbascella*, as I once suspected, and it certainly is not of any species I possess. It is the form of *D. liturella*, W. V., but is smaller, and at once distinguished by the colour of the legs, the uniform tint of the upper wings, with the dotted costa and darker under-wings. The only specimen I have seen was taken in the New Forest by Sir Charles Lyell about twenty years since.

31. Genus 1009. *Anacamptis*, Curt. Brit. Ent. fol. 189.

5. *A. lucidella*, Step.; *Cleodora lucidella*, Wood, pl. 40. f. 1240. This rare insect I found on some rushes near Newchurch in the Isle of Wight, the 1st of July, 1842, and Mr. Dale has taken it in the New Forest.

32. 26. *A. Lyellella*, Curt. It expands 6 lines and is cream-coloured: antennæ and legs mouse-colour, the latter spotted and striped with black externally: superior wings with three black costal spots, first a long one next the shoulder, a second at the centre, and a third further and larger; on the inner margin is an oblong patch, neither reaching the base nor the anal angle, yet extending more than midway to the costa; apex brownish with a black semicircle inclosing a dot at the tip: under-wings broad, suddenly pointed, pale fuscous and iridescent.

My specimen was taken by Sir C. Lyell the 9th of April in the New Forest.

33. Genus 1013. *Cleodora*, Step.; Curt. Brit. Ent. fol. 671.

6<sup>b</sup>. *C. neuropterella*, Zell. This insect, which I supposed was the *T. falciformis* of Haworth, I took in Aug. at Mickleham. One of my specimens expands 11 lines: the upper wings are falcate, ochreous shaded to white on the interior margin; the nervures and spots between them are rosy-fuscous or mouse-colour.

34. Genus 1015. *Apheloseitia*, Step.?

6<sup>b</sup>. *A. Inulella*, Curt. It expands 5 lines and is white: scales on head depressed; palpi recurved, scaly to the apex: superior wings narrow, lanceolate, ochreous, and freckled; costa, a line along the middle, with the radiating nervures and inferior margin white, and sometimes there is an oblique white stripe near the inner angle directed towards the tip; cilia long, pale, and dotted at the base: inferior wings silky dove-colour, nearly as broad as the superior, truncated at the extremity, the apex produced; cilia long and thick; hinder tibiæ stout, with hairy scales.

Very like *A. rufo-cinerea*, Haw., at first sight, but besides other differences, the under-wings are not lanceolate, which indicates an affinity to *Cleodora*. I bred two from flowers of *Inula dysenterica* the 28th of Aug. 1848, collected near Ryde in the Isle of Wight, and no doubt the caterpillars fed upon the seeds in the receptacles.

35. Genus 1017. *Damophila*, Curt. Brit. Ent. fol. 391.

3. *D. brevicornis* of Dale and the 'Guide' is the *Butalis æratella* of Zeller, Mr. Stainton informs me.

36. Genus 1021. *Pancalia*, Curt. Brit. Ent. fol. 304.

2. *P. fusco-cuprea*, Haw., I have taken at Podimore, near Sherborne in Dorset, the 8th of October.



3. *P. fusco-ænea*, Haw., is twice as large as the foregoing species. I have met with it the middle of August on the Downs near Lulworth, and also at Mickleham.

37. Genus 1023. *Microsetia*, Step.

4. *M. sericiella*, Haw. I found this little moth in abundance on the flowers of *Euphorbia amygdaloides* in Grovely Wood, near Wilton, the 9th May 1842.

Genus 1025. *Argyromyges*, Curt. Brit. Ent. fol. 284.

38. 1. *A. Autumnella*, Curt. B. E. pl. 284. This species is now decided to be the *T. Clerckella* of Linnæus, and the *A. Clerckella* of our cabinets is called *scitella*.

39. 1<sup>b</sup>. *A. Acerfoliella*, Curt.; *Padifoliella*, Stain. The male expands 4 lines, and the antennæ are longer than the wings: it is sickly-white, superior wings very narrow, falcate, fuscous with a pure white stripe along the interior margin, surrounding a long oblique curved line at the anal angle; the apex attenuated, incurved, spotted black and white with a very black dot at the tip: inferior wings very narrow, smoky as well as the long cilia. The female is near 5 lines in expanse, fuscous; head and thorax white: superior wings very narrow, less falcate than in the male and terminating like a feather, rich brown, the interior margin pure white with the inner edge irregular, forming a square near the base, an oblique lobe at the middle, and a loop at the anal angle, inclosing a brown spot; the cilia of the apex is white with black crescents on the extremity of the costa and round the tip, where there is a black dot: inferior wings very narrow and tapering to a point.

For a pair of this rarity I am indebted to Mr. T. Desvignes, who took several in September and October flying out of maples and whitethorns in Whittlebury Forest. The sexes seem to vary considerably, but neither of them agrees with Hübner's figure of *T. Padifoliella*, pl. 46. f. 316, in which the costa is white and the interior margin spotted dark, whereas in our species it is exactly the reverse.

40. 16. *A. hortella*, Fab., I took in a plantation near Wandsworth the 19th of May.

41. 21. *A. Cydoniella*, Step., is the *lautella* of Heyden. I found a beautiful specimen in Muller's Copse at Glanville's Wootton the 18th May 1842.

42. 6<sup>b</sup>. *A. maritima*, Stain. MS. The 26th of August, 1836, I first discovered this species on the banks of the river by St. Vincent's Rocks. It was tolerably plentiful.

43. 7. *A. obscurella*, Step. Ill. iv. 259. This insect occurs

amongst long grass in young plantations. I have taken it near Glanville's Wootton, Dorset, the 18th May.

Genus 1028. *Telea*, Step.

44. 2. *subfasciella*, Step. Ill. iv. 247. This I met with the 30th June at St. Martha's, near Guildford; the 9th July on Turk Mountain, near Killarney; and the 11th August at Mickleham.

45. 8. *Curtisella*, Don.; *cænobitella*, Hüb. It is now believed that the black *T. obscurella* of Hübner and the *T. picapennis* of Haworth are only dark varieties, but I have not seen any intermediate ones.

46. Genus 1030, 2. *Ypsolophus*, *Persicellus*, Haw., I find is not a variety of his *Y. bifasciatus*, the *T. sylvella* of Hübner; but a distinct species.

Genus 1031. *Cerostoma*, Lat.; Curt. Brit. Ent. fol. 420.

47. 4. *C. Xylostella*, Linn. I have a specimen expanding  $7\frac{1}{2}$  lines, with the stripe on the inner margin of the upper wings nearly concolorous with the rest, but I believe it is only a variety of this common species.

48. 5. *C. Dalella*, Stain. Syst. Cat. p. 11. This species was first given to me many years since by Sir C. Lyell, who took it at Kinnordy, and the beginning of August 1825 I discovered it amongst heath on the face of a rock in the Isle of Bute. As it agreed pretty well with Hübner's fig. 164. pl. 24, I gave it as his *T. vittella* in my 'Guide.'

Genus 1031<sup>b</sup>. *Acrolepia*, Curt. Brit. Ent. fol. & pl. 679.

This is a very remarkable group, so greatly resembling the *Tortricidæ*, that a careless observer, omitting to examine the palpi, would at once include it in the wrong family. In 1838 this genus was established in my 'Brit. Ent.' by dissection and elaborate definitions, and as Zeller did not publish the group until nearly two years after, his name and not mine must fall by the law of priority, which Mr. Stainton very justly recognises to its fullest extent.

49. 1. *A. autumnitella*, Curt. B. E. ib. I should not hesitate to adopt Mr. Stainton's opinion, that my species is the *Tortrix pygmæana* of Haworth's 'Lep. Brit.' p. 439, if he did not give 4 lines as the expanse of the wings, for my examples measure from  $5\frac{1}{2}$  to  $5\frac{3}{4}$  lines. Wood's figure 1136 of *Eupacilia pygmæana*, as he calls it, after Stephens, is apparently identical with my insect, as well as Duponchel's *Hæmilis Lefebvriella* (v. 11. p. 141. pl. 290. f. 11). Since this genus was published in the 'Brit. Ent.' I have seen specimens of *A. autumnitella*, flying in the day-

time about rose-trees in my garden at Hayes, the beginning of April.

50. 2. *A. Betulatella*, Curt. B. E. pl. & fol. 679. The only specimens I have seen were taken by Mr. Dale off birch-trees at Castle Eden Dene the beginning of August 1837. I have however a new species to describe which I shall name

51. 3. *Marcidella*, Curt. Cab. It expands  $6\frac{1}{2}$  lines, and is pale rusty-ochre: palpi recurved and tapering; antennæ slender, white, and dotted; head and back of thorax whitish: superior wings oblong, very much mottled, the costa arched and minutely spotted, with a dusky patch just beyond the middle, terminating internally in a longitudinal black line; from the outer angle projects obliquely a short brown line, and at the centre of the posterior margin may be traced an imperfect ring inclosing two or three short black streaks on the nervures; on the interior margin, before the middle, is a pale conical spot, with a dark margin next the base; cilia fuscous with a dark line at the base and two little black lines at the tip, forming one or two white dots: inferior wings as broad as the superior, very pale mouse-colour, apex ovate-lanceolate.

A pair of this moth was given to me by Mr. Robertson I think: the specimens have a worn or faded appearance.

52. 6. *A. granitella*, Fischer, has been sent to me by Mr. Dale. It is allied to the genus *Cerostoma*.

Genus 1038. *Gracillaria*, Haw.; Curt. Brit. Ent. fol. 479; *Ornix*, Treit.

53. 1. *G. Taxella*, Curt. Cab., expands  $3\frac{1}{2}$  lines, and is similar to *O. Meleagripennella* of Hübner, but the wings are not so narrow, and a double white spot near the tip of the costa distinguishes it. It is white; the hairs projecting from the forehead are brown: antennæ long and dotted: superior wings broad towards the apex, fuscous, with a lilac tinge at the extremity; ten white semicrescents ornament the costa, two at the apex nearly uniting and inclosing a black dot, which is bounded by black and white lines like a feather; the fringe is white with a fine black line; on the interior margin are two black spots, with white ones between them: inferior wings lanceolate and mouse-colour: abdomen fuscous spotted with white, the apex tufted in the male; the organs of generation bright ochreous: legs white and spotted.

The 2nd June 1839, I beat a few specimens out of yew-trees at Mickleham.

Genus 1040. *Pterophorus*, Geoff.; Curt. Brit. Ent. fol. 161.

54. 17. *P. similitactylus*, Curt., Dale. As neither Stephens's



description nor Wood's figure answers to my insect, I will add the characters of this species, which was unknown until I took three flying near the ground by a hedge at Niton, in the Isle of Wight, the 30th of July 1828.

It expands 1 inch and is yellowish-white: the superior wings are more or less freckled, deeply cleft, the upper lobe narrow and curved, the costa and inferior margins are tawny, forming an oblique line towards the extremity composed of two trigonate spots, that on the costa being the larger: inferior wings yellow-fuscous, divided into three rays, without any lobe on the abdominal one: legs white; thighs and hinder tibiæ tawny, the latter tipped fuscous; anterior tibiæ clavate and brown, except at the base, intermediate clubbed or tasseled with brown scales at the apex, and another similar tassel at the middle.

*P. similidactylus* varies in colour greatly, for one of my specimens is of an uniform dove-colour, except the darker markings on the upper wings, and the white but spotted legs. It is distinguished from the allied species by the narrow upper lobe of the superior wings and the tasseled spotted tibiæ.

18, Belitha Villas, Barnsbury Park, 1st Jan. 1850.

XIV.—*On Deposits of Diatomaceous Earth, found on the shores of Lough Mourne, County Antrim, with a record of species living in the waters of the Lake.* By the Rev. W. SMITH, F.L.S.

DURING a late visit to the North of Ireland I had placed in my hands, by Mr. J. M'Adam of Belfast, a small quantity of earth which from its peculiar appearance he fancied might contain the shells of "Infusoria." A very slight examination convinced me of the correctness of this conjecture, and proved that the entire substance of the earth in question consisted of a mass of unbroken or fragmental siliceous shells of various *Diatomacea*. Being desirous of ascertaining the exact nature of the deposit from which the earth had been procured, and how far it had claims to the character of "fossil," a term which has frequently, but I fear without sufficient consideration, been given to similar collections of these beautiful exuviæ, and understanding from Mr. M'Adam that the determination of the point would be of some importance as regarded a paper on the Geology of the district which he hoped in a short time to prepare for the 'Annals,' I determined to visit the spot, and record the particulars required from personal observation.

Lough Mourne is a sheet of fresh water of about two miles in circumference, lying amidst a range of low hills to the north-east of the town of Carrickfergus, at the distance of four miles from